

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
TYLER DIVISION**

INTERNET MACHINES LLC,	§	
	§	
v.	§	No. 6:10-cv-023
	§	
ALIENWARE CORP., ET AL.	§	

**MEMORANDUM OPINION & ORDER**

This claim construction order construes the disputed claim terms of United States Patents Nos. 7,421,532 (‘532 Patent) and 7,454,552 (‘552 Patent). Plaintiff filed an opening brief (Doc. No. 279), Defendants filed a response (Doc. No. 285), and Plaintiff filed a reply (Doc. No. 287). On June 9, 2011, the Court held a *Markman* hearing and heard argument. For the following reasons, the Court adopts the constructions set forth in the attached chart.

**BACKGROUND**

This is a patent infringement suit. The patents-in-suit belong to the same patent family. The ‘532 Patent is a continuation-in-part of the ‘552 Patent. The patents concern computer switches with transparent and non-transparent ports.

Plaintiff alleges Defendants infringe the ‘532 and ‘552 Patents. Defendant PLX Technology, Inc. manufactures computer switches allegedly capable of infringing the patents. The remaining Defendants are customers of PLX that incorporate the switches into their own products.

Generally speaking, this case is about devices that route or “switch” data inside a computer. The heart of a computer is its central processing unit, or CPU. The CPU is where a computer makes most of its calculations and operations. In addition to a CPU, a computer includes a variety of devices and components. For example, a computer may include a video card that plays an important

role in displaying information or images on a monitor or screen. Other components may include sound cards and network controllers.

Data must be able to move between components to carry out a computer's operations. For example, to display a document on a computer screen, a CPU must send information about what the document looks like from the computer's memory to the computer's video card. Or to play a sound, the CPU would send information to the sound card. The connections between a computer's various components are made by devices called "bridges" and "switches."

Bridges and switches are similar devices. Both enable the transmission of data from one component to another. Bridges connect two devices. Switches are more complicated and connect two or more devices. The patents-in-suit are directed toward switches.

The points where data flow in and out of bridges or switches are called ports. Ports may be referred to as "upstream" or "downstream" based on their position with respect to a CPU. Upstream ports are the ports closer to the CPU. Downstream ports are on the other end of the bridges or switches, further from the CPU.

To make sense of the connections between a computer's components, the CPU assigns each device an address. This process is often called "enumeration." During enumeration, the CPU sends signals through the switches and bridges attached to it. The ports forward the signal until it reaches a device, or "endpoint," and the CPU assigns that device an address. The CPU uses that address when it wants to send that device data.

A problem arises when a computer includes more than one CPU. Each CPU engages in its own enumeration process. As a result, the devices in the computer will receive different addresses

from each CPU. But devices in a computer must have a single, unique address so data can be sent to them.

The solution is to segregate the CPUs from one another by using a “non-transparent port.” Unlike a “transparent port,” a non-transparent port does not pass on the enumeration signal. Instead, it acts like an endpoint. A CPU that is on one side of a non-transparent port cannot see or give addresses to devices that are on the other side. Devices no longer receive conflicting addresses.

The patents-in-suit claim both apparatuses and methods that implement this solution. The apparatuses are switches with transparent and non-transparent ports. The methods are processes for switching data. Figure 1 of the ‘532 Patent is illustrative.

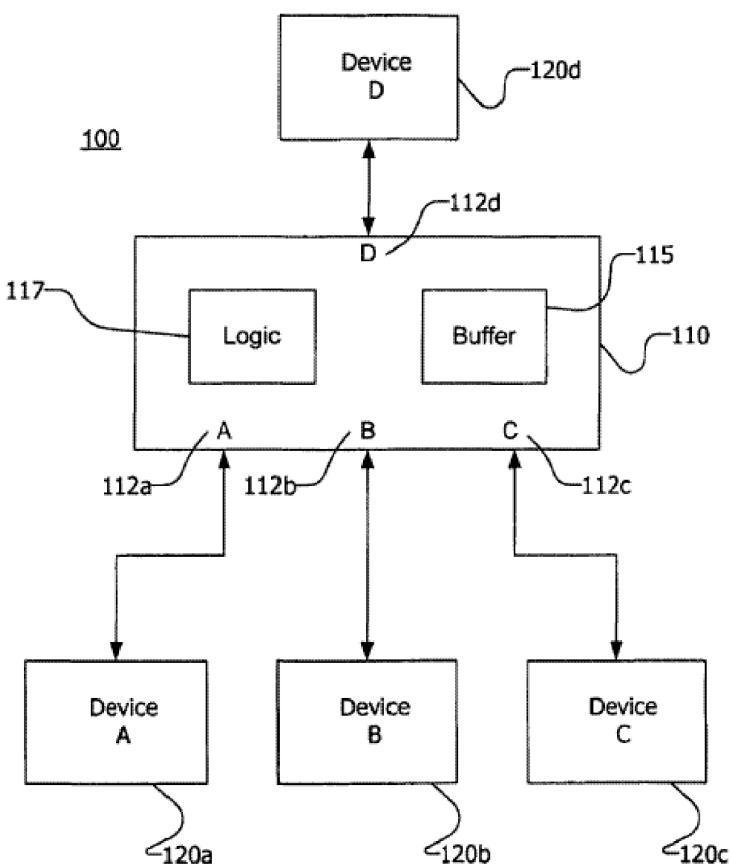


FIG. 1

This figure depicts a “switching environment 100.” ‘532 Patent 2:3–4. It includes “a switch 110 and a number of end points 120a, 120b, 120c, 120d.” *Id.* 2:4–5. It also includes “a buffer 115 and logic 117” and “a number of ports 112a, 112b, 112c, 112d.” *Id.* at 2:12–14.

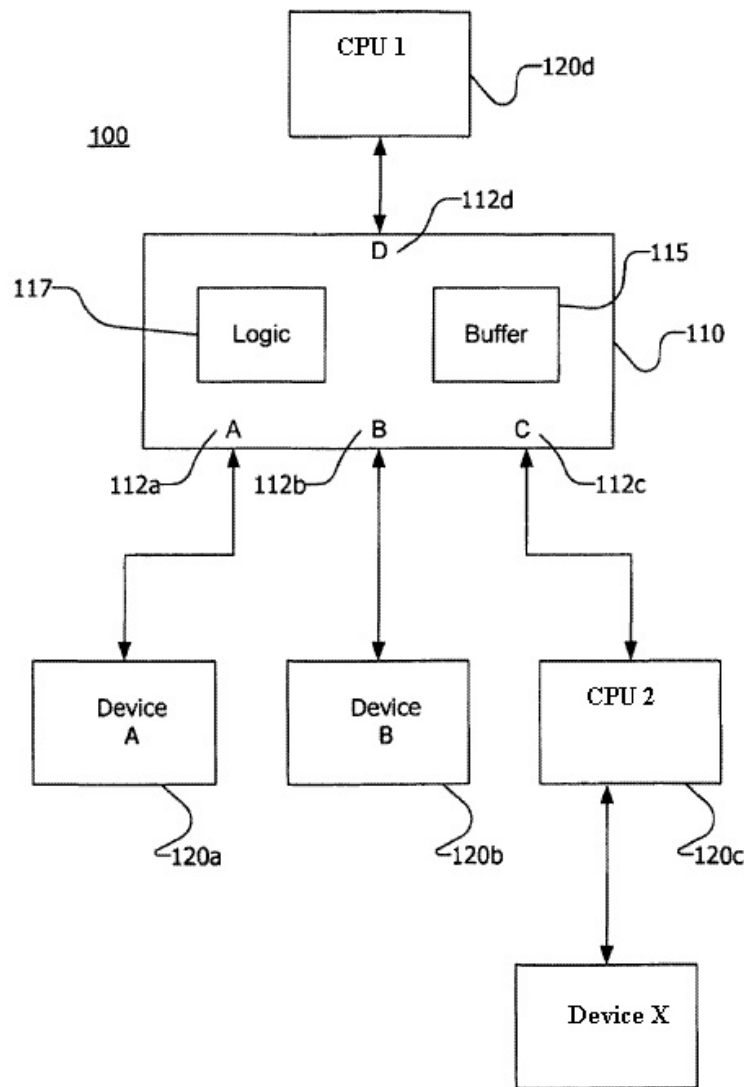
In a one-CPU scenario, Device D may be the CPU. All of the ports, A, B, C, and D, would be transparent ports. During enumeration, the CPU

would find and assign addresses to Devices A, B, and C.

In a two-or-more-CPU scenario, the arrangement of the ports is more complicated. Here, Figure 1 has been modified. Device D has been replaced with CPU 1, and Device C has been

replaced with CPU 2. During enumeration, both CPU 1 and CPU 2 will send signals to find devices that they are connected to. If all the ports were transparent, Devices A and B would potentially receive different addresses from each CPU.

Instead, the patent teaches that some of the ports can be configured as non-transparent. '532 Patent 4:3-4. Therefore, to avoid address conflicts, Port C could be configured as a non-transparent port. When CPU 1 enumerates, it will find and assign addresses to Devices A and B. When the enumeration signal reaches Port C, it will be not be passed on. CPU 1 will believe that Port C is an endpoint. Likewise, CPU 2 will find and assign addresses to other devices it is connected to, such as Device X in the modified figure. But when CPU 2's signal reaches Port C, it will be not be passed on and CPU 2 will believe Port C



it will be not be passed on. CPU 1 will believe that Port C is an endpoint. Likewise, CPU 2 will find and assign addresses to other devices it is connected to, such as Device X in the modified figure. But when CPU 2's signal reaches Port C, it will be not be passed on and CPU 2 will believe Port C

is an endpoint.

The effect of this is the isolation of CPU 1's "address domain," or list of addresses, from CPU 2's address domain. As the patent explains: "By 'isolated' it is meant that the address domains are separated such that interaction does not directly take place between them, and therefore uniquely addressable addresses are provided." '532 Patent 3:26–29.

But this does not mean that devices on the CPU 1 side of Port C are completely cut off from the devices on CPU 2's side of Port C. "Non-transparent ports allow interaction between completely separate addressing domains, but addresses from one domain must be converted from one domain to the other." '532 Patent 3:65–4:2. This conversion is referred to as "address translation." The patents do not discuss in detail how addresses are translated, but there are a number of methods known in the field.

Generally speaking, the patents-in-suit claim switches capable of having both transparent and non-transparent ports. Claim 1 of the '532 Patent is representative:

A switch with transparent and non-transparent physical interfaces comprising

a first physical interface for interfacing to a first device having a first address in a first shared address domain

a second physical interface for interfacing to a second device having a second address in the first shared address domain

a third physical interface for interfacing to a third device having a third address in a second address domain, wherein the second address domain is isolated from the first address domain

logic for switching data units between the first physical interface, the second physical interface and the third physical interface using mapped address I/O and masking the second address domain.

‘532 Patent 5:55–6:2. Claim 1 describes a switch with a first and second physical interface that are transparent and a third physical interface that is non-transparent. It also claims “logic,” or computer hardware, for translating addresses.

### **LEGAL STANDARD**

Claim construction is a matter of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). The purpose of claim construction is to resolve the meanings and technical scope of claim terms. *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). When the parties dispute the scope of a claim term, “it is the court’s duty to resolve it.” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008).

The claims of a patent define the scope of the invention. *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1324 (Fed. Cir. 2002). They provide the “metes and bounds” of the patentee’s right to exclude. *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Accordingly, claim construction begins with and “remain[s] centered on the claim language itself.” *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

Claim terms are normally given their “ordinary and customary meaning.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” *Id.*

The best guide for defining a disputed term is a patent’s intrinsic evidence. *Teleflex*, 299 F.3d at 1325. Intrinsic evidence includes the patent’s specification and the prosecution history. *Id.*

The claims are part of the specification. *Markman*, 52 F.3d at 979. The context in which a term is used in the claims instructs the term's construction. *Phillips*, 415 F.3d at 1314; *see also Abtox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed Cir. 1997) (“[T]he language of the claim frames and ultimately resolves all issues of claim interpretation.”). “Differences among claims can also be a useful guide in understanding the meaning of particular claim terms.” *Phillips*, 415 F.3d at 1314.

In addition to the claims, the specification's written description is an important consideration during the claim construction process. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). The written description provides further context for claim terms and may reflect a patentee's intent to limit the scope of the claims. *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000). But care must be taken to avoid unnecessarily reading limitations from the specification into the claims. *Teleflex*, 299 F.3d at 1326; *see also Raytheon Co. v. Roper Corp.*, 724 F.2d 951, 957 (Fed. Cir. 1983) (“That claims are interpreted in light of the specification does not mean that everything expressed in the specification must be read into all the claims.”). “[P]articular embodiments appearing in the written description will not be used to limit claim language that has broader effect.” *Innova/Pure Water*, 381 F.3d at 1117; *see also Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”).

The prosecution history is also part of the intrinsic evidence. *Phillips*, 415 F.3d at 1317. It “consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” *Id.* Statements made during the prosecution of the patent may limit the scope of the claims. *Teleflex*, 299 F.3d at 1326.

Finally, the Court may rely on extrinsic evidence to aid with understanding the meaning of claim terms. *Markman*, 52 F.3d at 981. Extrinsic evidence includes “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.” *Id.* at 980. Extrinsic evidence is generally less useful, *Phillips*, 415 F.3d at 1317, and it should not be relied on when it contradicts the intrinsic evidence. *Markman*, 52 F.3d at 981.

## **DISCUSSION**

The parties dispute the meaning and scope of six claim terms that can be addressed as two groups. The first group consists of: (1) port(s); and (2) physical interface(s). The second group is: (1) non-transparent port(s); (2) non-transparent physical interface(s); (3) transparent port(s); and (4) transparent physical interface(s). Finally, the parties agree on the construction of a number of terms.

### **I. Port(s) / Physical Interface(s)**

<b>Term</b>	<b>Plaintiff’s Proposal</b>	<b>Defendants’ Proposal</b>
Port(s)	Interface(s) for data	Physical point(s) of external interaction on a switch or bridge
Physical Interface(s)	Plain meaning / no construction; alternatively, interfaces which are physical	Physical point(s) of external interaction on a switch or bridge

Defendants propose that port(s) and physical interface(s) both be construed as “physical point(s) of external interaction on a switch or bridge.” Plaintiff argues these constructions excluded preferred embodiments, violate the doctrine of claim differentiation, and improperly read limitations into the claims.



Defendants' proposals can be divided into three parts. First, Defendants contend that both ports and interfaces must be "physical points." Second, their proposals require that these physical points be dedicated to "external interaction." Finally, the points must be "on a switch or bridge."

**A. Physical Points**

Plaintiff argues that construing ports as physical points excludes preferred embodiments and violates the doctrine of claim differentiation. Plaintiff contends that the word "physical" implies a physical connection. According to Plaintiff, this construction would exclude embodiments with ports that connect wirelessly or optically.

Defendants accuse Plaintiff of misreading their proposals. They contend that they have merely defined the points as physical without describing the nature of the connection. Defendants believe nothing about the construction precludes a connection from being wireless or optical.

Defendants are correct that their proposals do not require a physical connection with a port. The patent describes connections to ports "by electrical contacts, wirelessly, optically or otherwise." '532 Patent at 2:56–57. But Defendants' constructions only describe the physicality of the port. They do not exclude the preferred embodiments. A wireless antenna, for example, may be a physical object even though it communicates with other antennas wirelessly. Likewise, here, describing a port or interface as a physical point does not preclude wireless or optical connections.

Plaintiff also argues that, although the patents use the terms ports and interfaces interchangeably, they distinguish between interfaces and physical interfaces. The claims in the '552 Patent all refer to ports, while the claims of the '532 Patent refer to physical interfaces. Plaintiff says this difference demonstrates the patentee's choice to distinguish between interfaces that are physical and ports, which may or may not be physical.

Defendants answer that the patents clearly equate ports with not just interfaces, but physical interfaces. In support, Defendants cite the ‘532 Patent, which reads, “The switch 110 includes a number of ports 112a, 112b, 112c, 112d, which are physical interfaces.” ‘532 Patent 2:13–14.

Defendants’ description of ports as physical points excludes disclosed embodiments and violates the doctrine of claim differentiation. Although ports are equated with physical interfaces in one embodiment, the patent also equates ports with “logical interfaces” and “interfaces” that may not be physical. ‘532 Patent at 3:65–66, 4:56. Nothing suggests that ports should be limited to the particular embodiment where they are equated with physical interfaces. *Innova/Pure Water*, 381 F.3d at 1117 (stating that particular embodiments will not limit broader claims). On the contrary, there is a presumption that the patentee intended ports to encompass a different scope than physical interfaces. *Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1326 (Fed. Cir. 2003) (restating rule that when a claim includes a limitation that another claim does not, there is a rebuttable presumption that the claims have different scope).

Therefore, the construction of ports should not include a limitation that the ports must be physical.

## **B. External Interaction**

Plaintiff objects to the phrase “external interaction” in the construction of either ports or physical interfaces. Plaintiff argues this limitation would exclude preferred embodiments that permit communication between a port or physical interface and internal components of a switch.

Defendants argue that the primary purpose of ports or physical interfaces is interaction with endpoints. Defendants note that Figure 1 depicts the endpoints as outside of the switch.

Defendants' constructions are at odds with the written description of the invention. Although the patents describe ports communicating with endpoints, they also describe ports communicating with internal parts of the switch (e.g., the buffer and logic) as well as with each other. '523 Patent 2:13–15, 3:61–62, 4:48–52. Therefore, it would be inappropriate to limit these terms to external communications. *NeoMagic Corp. v. Trident Microsystems, Inc.*, 287 F.3d 1062, 1074 (“[A] claim construction that excludes the preferred embodiment is rarely, if ever correct.” (internal quotation marks omitted)).

### **C. On a Switch or Bridge**

Plaintiff contends the phrase “on a switch or bridge” is unnecessary. Plaintiff believes Defendants' only include the phrase in an attempt to bolster their obviousness case. In addition, Plaintiff says including the word “bridge” will confuse the jury when all of the claims are directed to “switches.”

Defendants argue that including bridge is proper because the '552 Patent discusses the use and operation of bridges. Defendants note that bridges and switches perform similar functions—the transfer and routing of data. And Defendants contend that a person of ordinary skill in the art would understand the purpose of switch and a bridge to be the same.

The constructions of ports and physical interfaces should not include the “on a switch or bridge” phrase because it is, at best, unhelpful, and at worst, confusing. The purpose of claim construction is “to clarify and when necessary to explain what the patentee covered by the claims.” *U.S. Surgical*, 103 F.3d at 1568. Here, the claims are plainly directed towards “switch[es] with . . . physical interfaces,” '532 Patent at 5:55–56, and “switch[es] with . . . ports.” '552 Patent at 5:9. Defendants' proposals add nothing to these claims. Instead, they introduce a potential point of

confusion by suggesting that the claimed “switches with ports” may have ports that are “on a bridge.” Accordingly, there is no need to include this phrase in the construction of these terms.

#### **D. Construction of the Terms**

Plaintiff proposes that physical interface does not require construction. Plaintiff construes port as “interface for data,” but suggested at the *Markman* hearing that the term is readily understandable to a lay jury and may not need construction.

Having resolved the parties’ disagreement about the scope of the claims, construction of these terms is unnecessary. “When the parties present a fundamental dispute regarding the scope of a claim term, it is the court’s duty to resolve it.” *O2 Micro Int’l*, 521 F.3d at 1362. But claim construction “is not an obligatory exercise in redundancy.” *U.S. Surgical*, 103 F.3d at 1568. At this time, the parties’ scope dispute may be settled without further defining these easily understood words. *But see Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd.*, 599 F.3d 1308, 1316 (Fed. Cir. 2010) (“[D]istrict courts may engage in a rolling claim construction, in which the court revisits and alters its interpretation of the claim terms as its understanding of the technology evolves.” (internal quotation marks omitted)).

The patents use the terms ports and physical interfaces in accordance with their plain and ordinary meaning. The terms do not include the additional limitations that Defendants’ proposals would have imposed. Although the Court is not assigning special definitions to these words, the parties may not present evidence or argument contrary to this order. *See Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206–07 (Fed. Cir. 2010) (affirming “plain and ordinary meaning” construction after court prevented the defendants from resurrecting their claim construction position during trial); *Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1334 (Fed. Cir. 2010)

(finding no *O2 Micro* problem where the parties “did not invite the jury to choose between alternative meanings”).

## **II. Transparent / Non-Transparent Port(s) / Interface(s)**

<b>Term</b>	<b>Plaintiff’s Proposal</b>	<b>Defendants’ Proposal</b>
Non-transparent Port(s)	Port(s) associated with a non-shared address domain (or domains)	Port(s) identified in a header or register as an endpoint and/or using a Type 0 configuration header
Non-transparent Physical Interface(s)	Physical Interface(s) associated with a non-shared address domain (or domains)	Physical Interface(s) identified in a header or register as an endpoint and/or using a Type 0 configuration header
Transparent Port(s)	Port(s) associated with a shared address domain	Port(s) identified in a header or register as an upstream or downstream port and/or using a Type 1 configuration header
Transparent Physical Interface(s)	Physical Interface(s) associated with a shared address domain	Physical Interface(s) identified in a header or register as an upstream or downstream port and/or using a Type 1 configuration header

The parties’ proposals for these four terms reveal a dispute about what it means to be transparent or non-transparent. Plaintiff’s definitions turn on the status of the address domain with which a port or physical interface associates. Non-transparent ports or interfaces associate with non-shared domain, while transparent ports or interfaces associate with shared domains.

Defendants, on the other hand, focus on how a port or physical interface identifies itself in a header or register. Defendants urge that non-transparent interfaces identify themselves as

endpoints or as using a Type 0 configuration header. Transparent interfaces identify themselves as upstream or downstream ports or as using a Type 1 configuration header.

Defendants' definitions require at least one of two features to distinguish between transparent and non-transparent interfaces. First, the interfaces must either identify as endpoints or as upstream or downstream interfaces. Second, the interfaces must identify as using a Type 0 or Type 1 configuration header.

**A. Identifying as an Endpoint / Upstream or Downstream Interface**

Plaintiff objects to this limitation as excluding disclosed embodiments. Plaintiff acknowledges that the patents mention registers, but argues that they are discussed in a different context and are not used to identify the status of an interface. Plaintiff also contends that the '532 Patent's mention of a header simply described one embodiment and should not be used to narrow the scope of the claims. Although a header or register can be used to identify the status of an interface, Plaintiff believes the patents describe a variety of other solutions.

Defendants argue the use of a header or register is supported by the patents' written descriptions. Defendants note that in some embodiments the interfaces are optionally non-transparent. That is, a port may be configured between transparent and non-transparent status. Defendants argue that, in practice, this configuration requires either a header or register.

Although Defendants' proposals may describe a common solution for identifying the status of an interface, the claims are not so limited. A register is a small piece of memory inside a switch. A header is also a piece of memory, usually a reserved piece in a larger amount of memory where configuration information is stored. In either implementation, data can be saved in the memory. The data can say whether the interface is transparent or not.

But the patents are not limited to these two solutions. As the written description explains, “[t]he status of a port-transparent or non-transparent-may be fixed or configurable. The logic 117 may allow designation on a port-by-port of transparency or non-transparency.” ‘532 Patent at 4:3–5. Thus, the logic 117 is the part of the invention that identifies the status of an interface.

The logic 117 may be a header or register, as Defendants’ propose, but it may also be other things. As the patents explain:

The logic 117 includes software and/or hardware for providing functionality and features described herein. The logic 117 may include one or more of: logic arrays, memories, analog circuits, digital circuits, software, firmware, and processors such as microprocessors, field programmable gate arrays (FPGAs), application specific integrated circuits (ASICs), programmable logic devices (PLDs) and programmable logic arrays (PLAs). The hardware and firmware components of the logic 117 may include various specialized units, circuits, software and interfaces for providing the functionality and features described herein.

‘532 Patent at 2:28–38. Clearly, the patents contemplated a variety of ways to identify the status of interfaces. Defendants offer no basis for limiting the scope of the claims to one or two particular embodiments. *Innova/Pure Water*, 381 F.3d at 1117 (stating that particular embodiments will not limit broader claims).

Plaintiff also argues that Defendants’ proposal, which requires interfaces to identify if they are either endpoints or upstream/downstream interfaces, violates the doctrine of claim differentiation and renders Claim 8 of the ‘532 Patent superfluous. Defendants do not respond to this argument.

Non-transparent ports are not necessarily presented as endpoints in every claimed embodiment. The ‘532 Patent describes some embodiments where non-transparent interfaces are presented as endpoints. ‘532 Patent 4:67–5:2, 5:12–14. But this language is absent from the ‘552

Patent. In addition, the claims of the ‘532 Patent illustrate that identification as an endpoint is an optional feature. Claim 1 describes transparent and non-transparent physical interfaces that have addresses in shared and non-shared domains, respectively. Claim 1 is silent as to whether anything identifies the interfaces’ statuses. Claim 8, which depends from Claim 1, adds a further limitation that “the non-transparent physical interfaces are presented as endpoints.”

“[T]he presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim.” *Phillips*, 415 F.3d at 1315. Here, Claim 8 adds the limitation that the non-transparent interface presents or identifies itself as an endpoint. Thus, Claim 1 presumptively does not include this limitation. And Defendants have cited no evidence to rebut this presumption. Therefore, it would be improper to require that the interfaces identify themselves as either endpoints or upstream / downstream interfaces.

#### **B. Using a Type 0 or Type 1 Configuration Header**

The second portion of Defendants’ definitions come from a reference considered by the PTO during the prosecution of the patents. Defendants cite a PLX webcast entitled “Utilizing Non-Transparent Bridging in PCI Express Base to Create Multi Processor Systems, Part I.” This webcast describes transparent bridges as those that use “a Type 1 header” and non-transparent bridges as those that use “a Type 0 header.” Defendants contend this webcast illustrates the industry’s understanding of how transparent and non-transparent interfaces were distinguished. Defendants further contend that this solution is supported by the patents’ written descriptions.

Plaintiff argues the patents are not limited to this method of distinguishing between transparent and non-transparent interfaces. Plaintiff concedes that the ‘532 Patent describes an



embodiment that relies on configuration headers, but it argues that the claims are not limited to that particular embodiment. Plaintiff further argues that adopting Defendants' constructions would be tantamount to importing limitations from PLX's preferred embodiment—an embodiment that the patentee had no role in developing.

The claims are not limited to an embodiment that uses configuration headers. The '532 Patent describes a version of the invention where “a transparent bridge may be associated with a different type of configuration space than a non-transparent bridge.” '532 Patent 5:6–8. The patent further explains that non-transparent bridges are identified as endpoints, and that “[t]he endpoint association is made via a non-transparent type configuration header.” '532 Patent 5:12–15. But the patent does not describe this as the only way to build the invention. Instead, it merely provides that this is one method that “may” be used. Therefore, it would be improper to read this limitation into the claims. *See SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001) (describing “reading a limitation from the written description into the claims” as “one of the cardinal sins of patent law”). Moreover, it would be inappropriate to extrapolate from this one embodiment's use of a configuration header to PLX's preferred embodiment. Defendants cite no evidence in the patents themselves, or in the prosecution history, that the patentee was claiming PLX's method for distinguishing between transparent and non-transparent ports.

### **C. Construction of the Terms**

Unlike Defendants' proposals, Plaintiff's constructions are supported by the intrinsic record and do not import unnecessary limitations into the claims. The patents plainly state that “the transparent ports are associated with a shared address domain, and the non-transparent ports are associated with non-shared address domains.” '532 Patent at 4:16–19. The patents also state that

“[p]orts within a shared addressed domain are considered ‘transparent,’ and those not within a shared address domain are considered ‘non-transparent.’” ‘532 Patent at 3:59–61. Plaintiff’s definitions track the written description’s discussion of these terms. They accurately reflect the distinction between transparent and non-transparent interfaces, as those terms are used in the patents.

Defendants argue that Plaintiff’s proposals require further definition because a jury would not understand what “associated” or “non-shared” mean. But Defendants do not elaborate and explain why those words would be unclear. Associated is simply used with its ordinary meaning—to group together, to connect or affiliate. And Defendants have presented no basis for believing that a jury would not understand that a “non-shared” thing is simply not “shared.” If the meaning of these words become a source of contention in the future, then further clarification may be necessary at that time. *See Pressure Prods. Med. Supplies*, 599 F.3d at 1316 (approving of supplemental claim construction to clarify meaning of claim term). But at this time there is no reason to elaborate on Plaintiff’s proposed definitions.

Therefore, the Court adopts Plaintiff’s proposals for these terms.

### **III. Agreed Terms**

The parties agree that a number of terms do not require construction: (1) associated with a separate configuration space; (2) associating; (3) data units are switched by the logic; (4) I/O-mapped I/O; (5) input/output address domains; (6) logic; (7) memory address domain(s); (8) memory-mapped I/O; (9) non-shared address domain(s); (10) non-transparent physical interfaces are presented as endpoints; (11) allowing a local subsystem to maintain a full address range separate from the main system; (12) routing data units; (13) separation such that interaction does not take place; (14) shared address domain; (15) software agents; (16) switching data units; (17) transferring data units; (18)

translating the destination addresses to the address domain associated with the destination devices; (19) translating the destination addresses to the non-shared address domain associated with the devices; (20) selectable to interface to devices in the first domain or the second domain; and (21) obtaining translation offsets.

In addition, the parties agree that the terms “PCI Express switch” and “in accordance with the PCI Express interconnect standard” do not require construction if the Court finds they are not indefinite. For the reasons stated in the Court’s order denying Defendants’ motion for summary judgment, those terms are not indefinite. Accordingly, the Court adopts the parties’ agreement that the terms do not require construction.

Finally, the parties agree that the following terms should be construed as follows:

<b>Term</b>	<b>Agreement</b>
Address domain	Range of addressable locations
Mapped address I/O	Memory-mapped I/O or I/O-mapped I/O
Masking the second address domain	Presenting or identifying the third physical interface as an endpoint
Masks the second address domain	Presents or identifies the third physical interface as an endpoint

**CONCLUSION**

For the reasons stated, the Court adopts the constructions set forth above, and listed on the attached chart.

**It is SO ORDERED.**

**SIGNED this 24th day of June, 2011.**

  
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MICHAEL H. SCHNEIDER  
UNITED STATES DISTRICT JUDGE